

**10/577382**

**IAP20 RECEIVED PTO 27 APR 2006**  
Dkt. 68548-PCT-US/JPW/JW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Shi Du Yan, et al.  
U.S. Serial No. : Not Yet Known (national stage of PCT International Application No. PCT/US2004/036173)  
Filed : Herewith  
For : METHODS FOR REDUCING SEIZURE-INDUCED NEURONAL DAMAGE

1185 Avenue of the Americas  
New York, New York 10036  
April 27, 2006

Mail Stop PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

In order to ensure compliance with applicants' duty of disclosure under 37 C.F.R. §1.56 and §1.97(a)-(d), applicants request that the following documents be considered and made of record in the above-identified application which is listed on Form PTO-1449, attached hereto as **Exhibit A**:

1. International Search Report issued by the International Searching Authority (ISA/US) on April 7, 2005 in connection with International Application No. PCT/US2004/036173 (**Exhibit 1**);
2. Tsuji H, Iehara N, Masegi T, Imura M, Ohkawa J, Arai H, Ishii K, Kita T, and Doi T. (1998) Ribozyme Targeting of Receptor for Advanced Glycation End Products in Mouse Mesangial Cells. *Biochem. Biophys. Res. Commun.* 245: 583-588 (**Exhibit 2**);

3. Bierhaus A, Illmer T, Kasper M, Luther T, Quehenberger P, Tritschler H, Wahl P, Ziegler R, Müller M, and Nawroth PP. (1997) Advanced Glycation End Product (AGE)-Mediated Induction of Tissue Factor in Cultured Endothelial Cells Is Dependent on RAGE. *Circulation* 96: 2262-2271 (**Exhibit 3**);
4. Sajithlal G, Huttunen H, Rauvala H, and Münch G. (2002) Receptor for Advanced Glycation End Products Plays a More Important Role in Cellular Survival than in Neurite Outgrowth during Retinoic Acid-induced Differentiation of Neuroblastoma Cells. *J. Biol. Chem.* 277(9): 6888-6897 (**Exhibit 4**);
5. Yan SD, Chen X, Fu J, Chen M, Zhu H, Roher A, Slattery T, Zhao L, Nagashima M, Morser J, Migheli A, Nawroth P, Stern D, and Schmidt AM. (1996) RAGE and amyloid- $\beta$  peptide neurotoxicity in Alzheimer's disease. *Nature* 382: 685-691 (**Exhibit 5**);
6. U.S. Patent No. 6,506,559 B1 (FIRE et al.), published January 14, 2003 (**Exhibit 6**);
7. U.S. Patent Application Publication No. 2003/0013699 A1 (DAVIS et al.), published January 16, 2003 (**Exhibit 7**);
8. Jen K-Y and Gewirtz AM. (2000) Suppression of Gene Expression by Targeted Disruption of Messenger RNA: Available Option and Current Strategies. *Stem Cells* 18: 307-319 (**Exhibit 8**);
9. Branch AD. (1998) A good antisense molecule is hard to find. *TIBS* 23: 45-50 (**Exhibit 9**);

10. Green DW, Roh H, Pippin J, and Drebin JA. (2000) Antisense Oligonucleotides: An Evolving Technology for the Modulation of Gene Expression in Human Disease. *J. Am. Coll. Surg.* 191(1): 93-105 (**Exhibit 10**);
11. Fire A. (1999) RNA-triggered gene silencing. *TIG* 15(9): 358-363 (**Exhibit 11**);
12. Caplen NJ, Fleenor J, Fire A, and Morgan RA. (2000) dsRNA-mediated gene silencing in cultured *Drosophila* cells: a tissue culture model for the analysis of RNA interference. *Gene* 252: 95-105 (**Exhibit 12**);
13. Fire A, Xu S, Montgomery MK, Kostas SA, Driver SE, and Mello CC. (1998) Potent and specific genetic interference by double-stranded RNA in *Caenorhabditis elegans*. *Nature* 391: 806-811 (**Exhibit 13**);
14. Lue L-F, Walker DG, and Rogers J. (2001) Modeling microglial activation in Alzheimer's disease with human postmortem microglial cultures. *Neurobiol. Aging* 22: 945-956 (**Exhibit 14**);
15. Carmeliet P, Moons L, and Collen D. (1998) Mouse models of angiogenesis, arterial stenosis, atherosclerosis and hemostasis. *Cardiovasc. Res.* 39: 8-33 (**Exhibit 15**); and
16. Written Opinion of the International Searching Authority issued by the International Searching Authority (ISA/US) on April 7, 2005 in connection with International Application No. PCT/US2004/036173 (**Exhibit 16**).

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Copies of documents numbers 1-16 are attached hereto as **Exhibits 1-16**, respectively.

No fee is deemed necessary in connection with the filing of this Information Disclosure Statement. However, if any fee is required, authorization is hereby given to charge the amount of such fee to Deposit Account No. 03-3125.

Respectfully submitted,



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PTO/SB/08B (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

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of

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**Complete if Known**

Application Number	NOT YET KNOWN
Filing Date	Herewith
First Named Inventor	Shi Du Yan
Art Unit	
Examiner Name	
Attorney Docket Number	68548-PCT-US/JPW/JW

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	1	International Search Report issued by the International Searching Authority (ISA/US) on April 7, 2005 in connection with International Application No. PCT/US2004/036173	
	2	Tsuji H, Ichara N, Masegi T, Imura M, Ohkawa J, Arai H, Ishii K, Kita T, and Doi T. (1998) Ribozyme Targeting of Receptor for Advanced Glycation End Products in Mouse Mesangial Cells. Biochem. Biophys. Res. Commun. 245: 583-588	
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Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Applicants: Shi Du Yan, et al.  
U.S. Serial No. NOT YET KNOWN  
Filed: Herewith (as §371 national stage of PCT/US2004/036173)  
Exhibit A

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Application Number	NOT YET KNOWN 7382
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First Named Inventor	Shi Du Yan
Art Unit	
Examiner Name	

Attorney Docket Number 68548-PCT-US/JPW/JW

**NON PATENT LITERATURE DOCUMENTS**

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	13	Fire A, Xu S, Montgomery MK, Kostas SA, Driver SE, and Mello CC. (1998) Potent and specific genetic interference by double-stranded RNA in <i>Caenorhabditis elegans</i> . <i>Nature</i> 391: 806-811	
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## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

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Sheet 3

of 3

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Attorney Docket Number 68548-PCT-US/JPW/JW

**U. S. PATENT DOCUMENTS**

## **FOREIGN PATENT DOCUMENTS**

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